

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A combiner comprising:
 - a) a first printed circuit board having a top surface and a bottom surface;
 - b) a first metallized area substantially covering the bottom surface of the first printed circuit board;
 - c) a first circuit line located on the top surface, the first circuit line having a first end and a second end;
 - d) a second circuit line located on the top surface, the second circuit line having a first end and a second end;
 - e) the first ends of the first and second circuit lines connected to an output port, the output port being spaced away from an edge of the first printed circuit board;
 - f) a first input port connected to the first circuit line second end, the first input port being spaced away from the edge of the first printed circuit board;
 - g) a second input port connected to the second circuit line second end, the second input port being spaced away from the edge of the first printed circuit board;
 - h) a second printed circuit board having a top surface and a bottom surface, the second printed circuit board mounted over the first printed circuit board;
 - i) a second metallized area substantially covering the top surface of the second printed board; and
 - j) a plurality of non-metallized voids located in the second metallized area above the first and second circuit lines, the non-metallized voids adapted to change the amplitude unbalance of the combiner.

2. (original) The combiner according to claim 1 wherein, the combiner is mounted within a case.
3. (original) The combiner according to claim 2 wherein, the first and second metallized areas are connected to the case.
4. (currently amended) The combiner according to claim 1 wherein, ~~the bottom surface of the second printed circuit board is insulative~~ the first and second circuit lines are c-shaped.
5. (original) The combiner according to claim 2 wherein, a plurality of fasteners hold the first and second printed circuit boards to the case.
6. (original) The combiner according to claim 1 wherein, the first ends of the first and second circuit lines are connected to a common line that is connected to the output port.
7. (currently amended) The combiner according to claim 1 wherein, ~~an unmetallized area covers a portion of the top surface of the first printed circuit board~~ the input and output ports are plated through holes.

8. (currently amended) A tunable combiner comprising:

- a) a case having a cavity, a top surface, a bottom surface, the cavity defining four walls and a mounting surface;
- b) a lower printed circuit board having a top surface and a bottom surface, the lower printed circuit board mounted in the cavity on the mounting surface;
- c) a first metallized area substantially covering the bottom surface of the first printed circuit board, the first metallized area in electrical contact with the case;
- d) a first circuit line located on the top surface and having one end connected to a first input port defined by a first plated through hole and another end connected to an output port defined by a second plated through hole;
- e) a second circuit line located on the top surface and having one end connected to a second input port defined by a third plated through hole and another end connected to the output port;
- f) an upper printed circuit board having a top surface and a bottom surface, the second printed circuit board mounted over the first printed circuit board in the cavity;
- g) a second metallized area substantially covering the top surface of the upper printed circuit board; and
- h) a first set of non-metallized voids located in the second metallized area juxtaposed to the first circuit line;
- i) a second set of non-metallized voids located in the second metallized area juxtaposed to the second circuit line, the voids adapted to change an electrical characteristic of the combiner;
- j) a cover mounted over the cavity and attached to the case.

9. (original) The tunable combiner according to claim 8 wherein, the first and second set of non-metallized voids are formed by cutting.

10. (original) The tunable combiner according to claim 8 wherein, the first and second set of non-metallized voids are formed by mechanical removal of the second metallized area.

11. (currently amended) The tunable combiner according to claim 8 wherein, a plurality of vias extend through the upper and lower printed circuit boards, the vias electrically connecting the first and second metallized areas the first and second circuit lines are c-shaped.

12. (original) The tunable combiner according to claim 8 wherein, the upper and lower printed circuit boards are attached to the case by a plurality of fasteners.

13. (original) The tunable combiner according to claim 8 wherein, the ends of the first and second circuit lines are connected to a common line that is connected to the output port.

14. (original) The tunable combiner according to claim 8 wherein, an unmetallized area covers a portion of the top surface of the lower printed circuit board.

15. (original) The tunable combiner according to claim 8 wherein, a third metallized area covers a portion of the top surface of the lower printed circuit board.

16. (original) The tunable combiner according to claim 8 wherein, at least one connector is mounted to the case, the connector electrically connected to one of the circuit lines.

17. (original) The tunable combiner according to claim 8 wherein, the bottom surface of the upper printed circuit board is insulative.

18. (original) A method of manufacturing a tunable combiner comprising the steps of:

- a) providing a lower printed circuit board having a top surface and a bottom surface, a first metallized area substantially covering the bottom surface of the first printed circuit board and a first circuit line located on the top surface, the first circuit line having one end connected to a first input port and another end connected to an output port, a second circuit line located on the top surface, the second circuit line having one end connected to a second input port and another end connected to the output port;
- b) providing an upper printed circuit board having a top surface and a bottom surface, the second printed circuit board having a second metallized area substantially covering the top surface of the upper printed circuit board;
- c) mounting the upper printed circuit board over the lower printed circuit board;
- d) monitoring the amplitude unbalance of the combiner; and
- e) removing a portion of the second metallized area above the first circuit line to form a first set of voids.

19. (original) The method according to claim 18 further comprising:

- a) monitoring the amplitude unbalance of the combiner; and
- b) removing a portion of the second metallized area above the first and second circuit lines to form a second set of voids until the amplitude unbalance is minimized.

20. (original) The method according to claim 19 further comprising:

- a) providing a case having a cavity and a mounting surface;
- b) attaching the circuit boards to the mounting surface;
- c) attaching the ports to a first, second and third connector mounted to the case; and
- d) mounting a cover over the cavity to seal the case.